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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/710,412	07/08/2004	Robert L. Bingle	71483-0014	5107
20915 7590 11/25/2008 MCGARRY BAIR PC 32 Market Ave. SW SUITE 500 GRAND RAPIDS, MI 49503				
EXAMINER				
GILES, NICHOLAS G				
ART UNIT		PAPER NUMBER		
2622				
MAIL DATE		DELIVERY MODE		
11/25/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/710,412

**Applicant(s)**

BINGLE ET AL.

**Examiner**

NICHOLAS G. GILES

**Art Unit**

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 3-7, 9-30, 51-55 and 57-65 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3-6, 9-30, 61 and 62 is/are allowed.
- 6) ☒ Claim(s) 7, 51-55, 58-60 and 63-65 is/are rejected.
- 7) ☒ Claim(s) 57 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07/08/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsman's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. Please note that the examiner has changed.

***Response to Arguments***

2. Applicant's arguments, see pages 12 and 13, filed 08/25/2008, with respect to the rejection(s) of claim(s) **1 and 47** (subject matter included in new claims 63 and 65) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Noguchi.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims **7, 51-55, 58-60, and 63-65** are rejected under 35 U.S.C. 103(a) as being unpatentable over Noguchi (U.S. Pub. No. 2002/0163586).

As stated in MPEP § 2111.02 (please see also *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 – CCPA 1951), if the preamble of the claim neither recites the limitations of the claim nor is necessary to give life, meaning, and vitality to the claim; then the preamble of the claim is not served to further define the structure of the claim. Thus, in regards to claims 63 and 65, the preamble of the claim is not given any

patentable weight since the preamble of the claim neither recites the limitations of the claim nor is necessary to give life, meaning, and vitality to the claim.

Regarding claim **63**, Noguchi discloses:

A camera having an image sensor (CCD) with an associated optical path, a light sensor providing a light sensor output that is indicative of lighting conditions in the vicinity of the camera (¶0026-0028, light sensor 26); and an infrared filter associated with the image sensor for attenuating infrared radiation (IR cutting filter 12 ¶0027-0030); wherein, in response to the output from the light sensor, the infrared filter is movable from a first position, wherein the infrared filter is disposed in the optical path of the image sensor for preventing transmission of the infrared radiation to the image sensor, and a second position, wherein the infrared filter is spaced from the optical path of the image sensor and does not prevent transmission of the infrared radiation to the image sensor (¶0027-0028).

Noguchi is silent with regards to the image sensor output being used for the lighting conditions. Official Notice is taken that it was well known at the time the invention was made to use image signals to determine the type of lighting conditions. This is advantageous in that feedback can be provided on the image sensor output to adjust the image adjustment settings (white balance, gain, gamma) of the camera to more accurately capture images. For this reason it would have been obvious to one of

ordinary skill in the art at the time the invention was made to have Noguchi include the image sensor output being used for the lighting conditions.

Regarding claim 7, see the rejection of claim 63 and note that Noguchi further discloses:

When the output is less than a first threshold, the infrared filter is in the first position, and when the output is greater than a second threshold, the infrared filter is in the second position (threshold used to determine that sensitivity is insufficient and threshold used to determine that sensitivity is sufficient, in this case the thresholds are the same, ¶¶0027-0028).

Regarding claim 64, see the rejection of claim 63 and note that Noguchi further discloses:

Gain applied to pixels of an image captured by the image sensor (¶¶0026, amplification).

Regarding claim 65, Noguchi discloses:

A camera having an image sensor (CCD) with an associated optical path and viewing area, a light sensor providing a light sensor output that is indicative of lighting conditions in the viewing area (¶¶0026-0028, light sensor 26); and an infrared filter associated with the image sensor for selectively attenuating infrared radiation (IR cutting filter 12 ¶¶0027-0030); wherein the infrared filter is responsive to the image sensor output such that the infrared filter prevents the image sensor from being exposed to

infrared radiation when lighting conditions in the viewing area correspond to bright light conditions, and does not prevent the image sensor from being exposed to infrared radiation when the lighting conditions in the viewing area correspond to low light conditions (§0027-0028).

Noguchi is silent with regards to the image sensor output being used for the lighting conditions. Official Notice is taken that it was well known at the time the invention was made to use image signals to determine the type of lighting conditions. This is advantageous in that feedback can be provided on the image sensor output to adjust the image adjustment settings (white balance, gain, gamma) of the camera to more accurately capture images. For this reason it would have been obvious to one of ordinary skill in the art at the time the invention was made to Noguchi include having the image sensor output being used for the lighting conditions.

Regarding claim 51, see the rejection of claim 65 and note that Noguchi further discloses:

Infrared filter is movable from a first position, wherein the infrared filter is disposed in the optical path of the image sensor for preventing transmission of the infrared radiation to the image sensor, and a second position, wherein the infrared filter is spaced from the optical path of the image sensor and does not prevent transmission of the infrared radiation to the image sensor (§0027-0028).

Regarding claim 52, see the rejection of claim 51 and note that the movement of the IR filter is covered in the rejection of claim 65.

Regarding claim **53**, see the rejection of claim 52 and note that Noguchi further discloses:

Gain applied to pixels of an image captured by the image sensor using automatic gain control (**¶0026**, amplification circuit controlled by control circuit).

Regarding claim **54**, see the rejection of claim 52 and note that Noguchi further discloses:

Image sensor output is a value representative of a gain determined by an automatic gain control (**¶0026**, amplification circuit controlled by control circuit and amplifies image signal).

Regarding claim **55**, see the rejection of claim 52 and note that Noguchi further discloses:

When the output is less than a first threshold, the infrared filter is in the first position, and when the output is greater than a second threshold, the infrared filter is in the second position (threshold used to determine that sensitivity is insufficient and threshold used to determine that sensitivity is sufficient, in this case the thresholds are the same, **¶0027-0028**).

Regarding claims **58-60**, see the rejection of claim 51 and note that Noguchi is silent with regards to a supplemental illumination system comprising a light emitting diode and selectively actuatable when the imaging system is activated. Official Notice is taken that it was well known at the time the invention was made to have LEDs be used

as a flash source for a camera. Such a setup is advantageous in that images can be captured in low light situations using the LED which also uses low power. For this reason it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Noguchi include a supplemental illumination system comprising a light emitting diode and selectively actuatable when the imaging system is activated.

***Allowable Subject Matter***

5. Claims **3-6, 9-30, 61, and 62** are allowed.

Regarding claim **61**, no prior art could be located that teaches or fairly suggests one threshold being greater than the other in combination with the rest of the limitations of the claim.

Regarding claims **3-6 and 9-30**, these claims depend on claim 61 and therefore are allowed.

Regarding claim **62**, no prior art could be located that teaches or fairly suggests one threshold being greater than the other in combination with the rest of the limitations of the claim.

6. Claim **57** is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.



Regarding claim 57, no prior art could be located that teaches or fairly suggests one threshold being twice the other in combination with the rest of the limitations of the claim.

### ***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to NICHOLAS G. GILES whose telephone number is (571)272-2824. The examiner can normally be reached on Monday through Friday from 7:30am to 4:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ngoc-Yen Vu can be reached on (571) 272-7320. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/NG/

11/20/2008

*/Ngoc-Yen T. VU/*

*Supervisory Patent Examiner, Art Unit 2622*